Natural Intelligence makes 4D development easy

Shell helps users build 'clean, classic' Mac apps

By Henry Norr

Cambridge, Mass. — Natural Intelligence Inc. last month introduced Easy4D, a feature-laden application shell and development environment for ACIUS Inc.'s 4th Dimension.

Available now at an introductory price of \$299, Easy4D provides a database that

Media Lab Mac man takes it Easy4D at MIT

"Easy4D is too slick for words," said Robert Murray, Mac administrator at the Media Lab at the Massachusetts Institute of Technology in Cambridge and a beta tester of Natural Intelligence's new application shell and development environment. "It gives me easy access to all the best techniques for [4th Dimension] coding."

Murray, who used 4D from ACIUS to create a variety of applications for the lab's administration, including databases of visitors, sponsors, personnel and intellectual property, said he has now ported his programs to Easy4D to take advantage of its elegant interface. "I used 4D Mover (a \$200 utility marketed by ACIUS) to bring my file structure over," he said. "All I had to do was add the layouts for my files and hook in my procedures to Easy4D's."

Because all the programs now have the same interface, which he said is very clearly explained in the user manual, users are finding the applications much easier to use, according to Murray.

"It's a real godsend for people like me," said Murray, who manages the lab's Mac network in addition to developing databases. "Independent developers maybe can write their own shell, but I just don't have time." — By Henry Norr

developers can use as a foundation for their own applications, reducing development, debugging and updating time. For the user, the company said, Easy4D's preconfigured layouts, buttons and menus ensure that applications will carry "a clean, consistent, classic Macintosh interface."

Features built into Easy4D include:

▶ User-customizable help. Easy4D's HelpMemos provide context-sensitive online help. Help information can be imported or exported in text format, and users can personalize the system by attaching notes to Help topics.

▶ Word processing with mail-merge capabilities. The program's Print Merge Editor supports separately formatted headers and footers, a Formula Editor for building expressions, and a Microsoft Wordlike glossary function.

▶ Management of custom reports. The program lets users search, sort and attach descriptive information to all 4D report types. Reports are listed in a dialog box that resembles the Mac's standard Open dialog, complete with small icons, a hierarchical system of nested folders and a Finderlike Get Info facility.

▶ **Keywords.** The package's EasyKeys feature supports pop-up keyword selection and on-the-fly additions to the keyword list.

- ▶ Multiple layouts. The program lets users select from among multiple input and output layouts in each file. A library of fully functional templates that can be copied and pasted to create input and output layouts is included
- ▶ Import/export. Easy4D's Import/ Export Manager provides several features not available in the ACIUS package, including support for fixed-length records, fieldname headers and quote-enclosed fields.
- ▶ Preferences. A Preference Editor lets the developer set up a system of user preferences without editing layouts or writing code.

▶ Extended debugging. Extending 4D's own debugging capabilities, Easy 4D allows direct querying of all fields and variables; evaluates expressions; executes statements; maintains a history of the last 10 debugger entries; and lists all 4D commands, functions and operators in pop-up menus.

Easy4D comes with four heavily illustrated manuals, totaling more than 300 pages. One of the manuals, a concise guide for end users, is delivered in electronic form as well

as hard copy.

The Easy4D price includes 60 minutes of technical support over the phone. Natural Intelligence also offers support on the company's own bulletin board and on ACIUS'

CompuServe forum.

The program, available directly from Natural Intelligence, comes with a full 30-day money-back guarantee. No licensing fee is required for non-commercial applications; developers who wish to incorporate Easy4D into commercial programs should contact the company.

Natural Intelligence Inc. is located at 86 Richdale Ave., Cambridge, Mass. 02140;

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One feature of Easy4D, Natural Intelligence's new application shell and development environment for ACIUS' 4th Dimension, is a help system that developers and users can customize for their own applications.

